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NOTICE OF ALLOWANCE AND FEE(S) DUE

5514	7590	05/22/2009

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER
YALEW, FIKREMARIAM A

ART UNIT	PAPER NUMBER
2436	

DATE MAILED: 05/22/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,418	07/18/2003	Patrice Onno	01807.002407.	2799

TITLE OF INVENTION: METHOD AND DEVICE FOR TRANSFORMING A DIGITAL SIGNAL

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	08/24/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Page 1 of 3

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: __Mail__ Mail Stop ISSUE FEE
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____ (Depositor's name)

_____ (Signature)

_____ (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,418	07/18/2003	Patrice Onno	01807.002407.	2799

TITLE OF INVENTION: METHOD AND DEVICE FOR TRANSFORMING A DIGITAL SIGNAL

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	08/24/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
YALEW, FIKREMARIAM A	2436	380-269000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

☐ A check is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____   Date _____

Typed or printed name _____   Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.   OMB 0651-0033   U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,418	07/18/2003	Patrice Onno	01807.002407.	2799

5514 7590 05/22/2009	EXAMINER
FITZPATRICK CELLA HARPER & SCINTO	YALEW, FIKREMARIAM A
30 ROCKEFELLER PLAZA	ART UNIT : PAPER NUMBER
NEW YORK, NY 10112	2436

DATE MAILED: 05/22/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 596 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 596 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

	Application No.	**Applicant(s)**
Notice of Allowability	10/621,418	ONNO ET AL.
	Examiner	**Art Unit**
	Fikremariam Yalew	2436

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _03/17/2009_.

2. ☒ The allowed claim(s) is/are _1,3,4,6-10,12-21,23-31 and 36-39_.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

      a) ☒ All   b) ☐ Some*   c) ☐ None   of the:

          1. ☐ Certified copies of the priority documents have been received.

          2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

          3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the
              International Bureau (PCT Rule 17.2(a)).

     * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF
    INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
        Paper No./Mail Date _____.

    **Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of
    each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the
    attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08),
    Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit
    of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413),
    Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

DETAILED ACTION

1.   This office action correspondence is a response to the applicant's amendment filed on

03/17/2009. After reconsideration of the applicant's amendment filed on 03/17/2009, further

search and through examination of the present application, claims 1-4,6-21,23-31,36-39 are

found to be in condition for allowance over prior arts of record. Claims 5,22,32-35 are canceled

and 37-39 newly added.

EXAMINER'S AMENDMENT

2.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

        Authorization for this examiner's amendment was given in a telephone interview with

Jonathan Berschadsky on May 18, 2009.

        The applicant has been amended as follows:

        Claim 1(Currently Amended) A method of scrambling a digital signal,

comprising the steps of:

                        decomposing the digital signal into a plurality of regions, each region

containing digital data;

                        encoding the digital signal in a format comprising header data specific to

each region, the header data including a parameter representing a number of bitplanes of samples

of a corresponding region; and

modifying the parameter to cause an erroneous value of an amplitude of the samples, thereby causing the digital signal to be degraded,

wherein the digital data of the digital signal are digital samples representing physical quantities, and

wherein the number of bitplanes includes a number of zero bitplanes and a number of non-zero bitplanes, and the number of bitplanes are encoded based on the difference between (1) a number of reference bitplanes and (2) the number of zero bitplanes.

Claim 10 (Currently Amended) A method of descrambling a digital signal decomposed into a plurality of regions, each region containing digital data, the digital signal being encoded in a format comprising header data specific to each region, the header data including a modified version of a parameter representing a number of bitplanes of samples of a corresponding region, the parameter having been modified to cause an erroneous value of amplitude samples to cause the digital signal to be degraded upon decoding, the method comprising the steps of:

receiving [[the]] a digital signal decomposed into a plurality of regions, each region containing digital data, the digital signal being encoded in a format comprising header data specific to each region, the header data including a modified version of a parameter representing a number of bitplanes of samples of a corresponding region, the parameter having been modified to cause an erroneous value of amplitude samples to cause the digital signal to be degraded upon decoding, wherein the digital data of the digital signal are digital samples representing physical quantities, and wherein the modified version of the parameter includes a

modified number of bitplanes including a modified number of zero bitplanes and a number of

non-zero bitplanes, and the modified number of bitplanes are encoded based on the difference

between (1) a number of reference bitplanes and (2) the modified number of zero bitplanes; and

modifying in reverse the modified version of the parameter to restore the parameter representing

a number of bitplanes of samples of a corresponding region.

Claim 18 (Currently Amended) A device for scrambling a digital signal,

comprising:

a processor coupled to a memory storing code, which when executed by

the processor, causes the processor to perform the steps of:

decomposing the digital signal into a plurality of regions, each region

containing digital data;

encoding the digital signal in a format comprising header data specific to

each region , the header data including a parameter representing a number of bitplanes of

samples of a corresponding region; and

modifying, the parameter to cause an erroneous value of an amplitude of

the samples, thereby causing the digital signal to be degraded.

wherein the digital data of the signal are digital samples representing

physical quantities, and

wherein the number of bitplanes includes a number of zero bitplanes and a number of non-zero bitplanes, and the number of bitplanes are encoded based on the difference between (1) a number of reference bitplanes and (2) the number of zero bitplanes.

Claim 31 (Currently Amended) A computer-readable medium information storage means which can be read by a computer or a microprocessor, the computer-readable medium storing code instructions of a computer program, which when executed by the computer or microprocessor, cause the computer or microprocessor to execute the steps of a method of descrambling a digital signal ~~decomposed into a plurality of regions, each region containing digital data, the digital signal being encoded in a format comprising header data specific to each region, the header data including a modified version of a parameter representing a number of bitplanes of samples of a corresponding region, the parameter having been modified to cause an erroneous value of amplitude samples to cause the digital signal to be degraded upon decoding,~~ the method comprising the steps of:

receiving [[the]] a digital signal <u>decomposed into a plurality of regions, each region containing digital data, the digital signal being encoded in a format comprising header data specific to each region, the header data including a modified version of a parameter representing a number of bitplanes of samples of a corresponding region, the parameter having been modified to cause an erroneous value of amplitude samples to cause the digital signal to be degraded upon decoding, wherein the digital data of the digital signal are digital samples representing physical quantities, and wherein the number of bitplanes includes a number of zero</u>

bitplanes and a number of non-zero bitplanes, and the number of bitplanes are encoded based on

the difference between (1) a number of reference bitplanes and (2) the number of zero bitplanes;

and

        modifying in reverse the modified version of the parameter to restore the

parameter representing a number of bitplanes of samples of a corresponding region.

     Please delete claims 2, 11, and 19.

Allowable Subject Matter

3.   Claims 1,18,30 are patentable over the closest references Kayaman et al (hereinafter

referred as Kayama) US Pub No 2002/0027994 in view of Wee (hereinafter as Wee) US

Pub No 7,184548 B2 and further view of Yoshida(US Patent No 4,685,098) because the

combinations of the prior art do not anticipate nor fairly and reasonably teach a

method/apparatus/computer-readable medium of scrambling a digital signal, comprising the

steps of:

        decomposing the digital signal into a plurality of regions, each region

containing digital data;

        encoding the digital signal in a format comprising header data specific to

each region, the header data including a parameter representing a number of bitplanes of samples

of a corresponding region; and

        modifying the parameter to cause an erroneous value of an amplitude of

the samples, thereby causing the digital signal to be degraded,

        wherein the digital data of the digital signal are digital samples

representing physical quantities, and

wherein the number of bitplanes includes a number of zero bitplanes and a number of non-zero bitplanes, and the number of bitplanes are encoded based on the difference between (1) a number of reference bitplanes and (2) the number of zero bitplanes.

4.   Claims 10,27,31 are patentable over the closest references Kayaman et al (hereinafter referred as Kayama) US Pub No 2002/0027994 in view of Wee(hereinafter referred as Wee) US Pub No 7,184548 B2 and further view of Yoshida(US Patent No 4,685,098) because the combinations of the prior art do not anticipate nor fairly and reasonably teach a method of descrambling a digital signal, the method comprising the steps of:

receiving a digital signal decomposed into a plurality of regions, each region containing digital data, the digital signal being encoded in a format comprising header data specific to each region, the header data including a modified version of a parameter representing a number of bitplanes of samples of a corresponding region, the parameter having been modified to cause an erroneous value of amplitude samples to cause the digital signal to be degraded upon decoding, wherein the digital data of the digital signal are digital samples representing physical quantities, and wherein the modified version of the parameter includes a modified number of bitplanes including a modified number of zero bitplanes and a number of non-zero bitplanes, and the modified number of bitplanes are encoded based on the difference between (1) a number of reference bitplanes and (2) the modified number of zero bitplanes; and modifying in reverse the modified version of the parameter to restore the parameter representing a number of bitplanes of samples of a corresponding region.

Conclusion

6.   Claims 1,3-4,6-10,12-18,20-21,23-31,36-39 are patentable. Claims 2,5,11,19,22,32-35

7.   Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays should be clearly labeled "Comments on

statement of Reasons for allowance."

        Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Fikremariam Yalew whose telephone number is 5712723852.

The examiner can normally be reached on 9-5.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Moazzami Nasser, can be reached on 5712738300. The fax phone number for the

organization where this application or proceeding is assigned is 571-272-4195.

        Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fikremariam Yalew/   /Nasser G Moazzami/
Examiner, Art Unit 2436   Supervisory Patent Examiner, Art Unit
05/18/2009   2436